

DOCUMENT RESUME

ED 266 851

PS 015 645

AUTHOR Larsen, Jean M.
TITLE Family Influences on Competencies in Low-Risk
Preschool Children.
PUB DATE Apr 85
NOTE 34p.; Paper presented at the Biennial Meeting of the
Society for Research in Child Development (Toronto,
Ontario, Canada, April 25-28, 1985).
PUB TYPE Reports - Research/Technical (143) --
Speeches/Conference Papers (150)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Advantaged; Demography; *Family Influence;
*Intelligence Quotient; *Interpersonal Competence;
Models; Physical Fitness; *Predictor Variables;
*Preschool Children; Preschool Education; Self
Concept

ABSTRACT

IQ, social competency, physical abilities, self-concept, and family demographic data on 73 low-risk preschoolers were used to investigate relationships between family influences and competencies of educationally advantaged children. Preschool attendance, living in a two-parent family, father's occupation, mother's education, family income, and time father spends with the child correlated with IQ. Emerging in the final regression analysis model as predictors of higher IQ were father's occupation, preschool attendance, and living in a two-parent family, with father's occupation the strongest predictor variable. Influence variables entered into the regression analysis for motor skill, as measured by static balance, were number of older siblings, preschool non-attendance, time mother spends with the child, and mother not employed. Time mother spends with the child, preschool non-attendance, and number of older siblings were included in the final regression model for the static balance measure of motor skill, with mother time the strongest predictor. The only predictor variable included in the final model for the strength dimension of motor abilities, as indicated by long jump score, was the child's sex. Males scored higher. (Author/RH)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

PS

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

X This document has been reproduced as
received from the person or organization
originating it.

☐ Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official NIE
position or policy.

Family Influences on Competencies
in Low-Risk Preschool Children

Jean M. Larsen, Ph.D.

Early Childhood Education

Department of Family Sciences

Brigham Young University

Provo, Utah

"PERMISSION TO REPRODUCE THIS
STATEMENT HAS BEEN GRANTED BY

Jean M.
Larsen

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

Running Head: FAMILY INFLUENCES ON COMPETENCIES

Paper presented at the Biennial Meeting of the Society for
Research in Child Development, Toronto, Canada, April 25-28,
1985. Requests for copies should be sent to Dr. Jean M. Larsen,
ECE Program Coordinator and Research Project Director, 1319-A
SFLC, Brigham Young University.

ED266851

PS 015645

ABSTRACT

IQ, social competency, physical abilities, self-concept and family demographic data on 73 low-risk preschoolers (35 attenders of a university preschool and 38 non-attenders) were used to investigate the relationships between family influences and competencies of educationally-advantaged children. Data were analyzed using a two step process. First, Pearson Product-moment coefficients between family characteristics along with preschool attendance (exogenous variables) and the competency measures: IQ, self-concept, social competence and motor abilities (endogenous variables) were computed. Second, related variables were entered into a series of stepwise multiple regression analyses.

Preschool attendance, living in a two parent family, father's occupation, mother's education, family income and the time father spends with the child correlated with IQ. Emerging in the final regression analysis model as predictors of higher IQ were father's occupation, preschool attendance and living in a two parent family with father's occupation the strongest predictor variable. Influence variables entered into

the regression analysis for motor skill as measured by static balance, were number of older siblings, preschool non-attendance, time mother spends with the child, and mother not employed. Time mother spends with the child, preschool non-attendance, and number of older siblings were included in the final regression model for the static balance measure of motor skill with mother time the strongest predictor. The only predictor variable included in the final model for the strength dimension of motor abilities, as indicated by long jump score, was the child's sex (males scored higher).

Family Influences on Competencies
in Low-Risk Preschool Children

Research has shown various aspects of children's development and learning to be influenced by home environments as well as participation in early intervention programs (e.g., Elardo & Bradley, 1981; Wachs, 1978; Walberg & Marjoribanks, 1976; Lazar, Darlington, Murray, Royce, & Snipper, 1980). Many early childhood researchers have focused their work on children's cognition, with less attention given to other competency areas. Such has been the case in a series of longitudinal studies conducted with widely different sample populations at various locations in the United States and Canada (see Gottfried, 1984). These studies have attempted to specify the relationship between home environment and early cognitive development.

Although an increasing number of recent investigations have been directed toward social competence developed in the early years (e.g., Kennedy & Bakeman, 1984), there seems to be a decrease in studies concerned specifically with the development of motor skills. Some researchers, however, have studied social/emotional

development as well as physical abilities in relation to cognitive functioning and academic achievement (e.g., Green, Forehand, Beck, & Vosk, 1980; Pollitt & Mueller, 1982). Yet, investigators for the most part continue to emphasize intellectual outcomes in their study of young children.

In addition to much of the research regarding children's development being limited to the cognitive domain, the majority of early childhood studies in the past two decades have involved only high-risk/disadvantaged children (e.g., Schweinhart & Weikart, 1980). As suggested by the Gottfrieds (1984), it cannot be assumed that data obtained on specific variables in one population can be generalized to others. For this reason the present study was conducted in an effort to gain greater insight concerning influences on a broader range of competency in a designated population other than disadvantaged. The specific aim of the study was to identify family influences, not only on the intellectual, but also, social/emotional and motor development of low-risk/educationally advantaged preschool children.

The present study is part of a larger longitudinal research project designed to investigate the immediate and long-term effects of preschool attendance upon middle and upper-middle SES children and their families. This ten year project, now in its fifth year, is being conducted at the Brigham Young University Early Childhood Education Laboratory Preschool, in Provo, Utah. Ultimately, five waves of children and their parents will have been followed from preschool through the primary grades of elementary school.

An initial report of the longitudinal study indicated that experience in preschool may be contributing to increased social competence in low-risk children (Larsen, Hite, & Hart, 1983). However, in a revised analysis of this data with aggregated data from two subsequent study waves, the previously observed immediate increase in social competency for preschool attenders was not present. Findings from the follow-up analysis, reported by Larsen, Draper and Hite (1984), further indicated that IQ scores were shown to be related to preschool attendance. The discrepancy in findings between these preliminary reports was attrib-

uted to an obscure age bias that existed in the first three study waves and upon its detection an appropriate statistical program was used to control for the age factor in re-examining the data. The finding of increased IQ for preschool attenders emerged from the revised analysis.

Since preschool programs involving non-disadvantaged children have not necessarily relied upon the same basic premise as the compensatory programs for deprived children, similar effects were not totally expected. Early intervention for disadvantaged children has been influenced by the "deficit hypothesis" (Hunt, 1961; Miller & Dyer, 1975). Briefly, the deficit hypothesis assumes that early stimulation is a powerful determinant of later competence and that children from economically and educationally disadvantaged homes receive less early stimulation than children from economically and educationally advantaged homes. Following on these assumptions, programs for disadvantaged children have been designed to make up this deficit by providing enriching experiences. One tacit assumption of the deficit hypothesis is that non-disadvantaged children

are likely to receive adequate stimulation at home and thereby experience only minimal benefits from preschool. Indeed, if assumptions regarding the deficit hypothesis are correct, then it may be expected that family influences would emerge as stronger predictors of low/risk children's cognitive functioning and general competency than preschool attendance.

Although earlier studies with disadvantaged children have shown that an early educational experience could increase IQ, (e.g. Ramey & Smith, 1977; Ramey & Haskins, 1981), this effect has been largely viewed as a motivational effect and transitory (Zigler & Trickett, 1978; Zigler & Seitz, 1980). Since studies of the disadvantaged have not found long term IQ differences to be related to attendance at preschool (e.g. Berrueta-Clement, Schweinhart, Barnett, Epstein, & Weikart, 1984), it is likely none will be found for the advantaged children in the BYU longitudinal study. Nevertheless, the indication in three previous study waves that higher IQ scores for educationally-advantaged children may be associated with preschool attendance, has promoted interest in further exploration of this

effect. Therefore, the present study will attempt to identify influences, if there be any, beyond a preschool experience on outcome measures of educationally-advantaged children.

Method

Subjects

One of the subject waves of the BYU longitudinal research project was used as the study sample. Each of the five waves in the on-going study consists of an experimental and a control group. Once a year, parents in the local area make application for their children to attend the BYU preschool. From the pool of applicants children are then randomly selected to fill the laboratory groups. Children who had attended the campus preschool for a minimum of two semesters compose experimental groups for each wave, while subjects for control groups were drawn from applicants who were not selected by the random draw to attend the preschool and who had not attended other preschool programs in the area.

Although an age bias had been detected in three prior subject waves of the longitudinal study, this

problem was remedied for the present investigation. Subjects in this wave were controlled for age and gender. The total number of children in the sample was 73, 35 preschool attenders (18 males and 17 females) and 38 preschool non-attenders (19 males and 19 females).

The children in the study were determined to be low-risk/educationally-advantaged since the vast majority were living with both parents; and the parent's education level, as well as the levels of father's occupation and family income were above average for the Mountain States region of the country (U.S. Census, 1980). Approximately 97 percent of the fathers and 92 percent of the mothers had attended some college. Some 45 percent of the families reported income of more than \$30,000 with under three percent indicating an income of \$15,000 or less (1983 dollars). Those parents with lower incomes tended to be university students who would be expected to hold many of the same values and to provide their children with enrichment experiences similar to those provided by the more affluent parents in the sample.

In addition to these socioeconomic factors, the large majority of the families applying to the BYU preschool program maintain a very active religious affiliation (Mormon) that emphasizes child-centered family activities. As an institutionalized part of their religious activity, both mothers and fathers are encouraged to spend time teaching and building positive relationships with their children. It may be further noted that Mormon parents have been shown to have very high achievement expectations for their children which are likely to influence their child rearing practices (Dewey & McKinney, 1976).

While the home and family experiences of the children in the sample are not typical, they could be very similar to those of children of other achievement oriented/middle and upper-middle SES parents. In any case, the educational and financial advantages enjoyed by many of these children, as well as the religious emphasis and achievement orientation of families should have produced a truly non-disadvantaged sample from which influences specific to their competencies may be identified.

Preschool Program

The BYU preschool provides a practicum setting for teacher training. For this reason, as well as the natural affiliation with the university, the program has been influenced by numerous teaching philosophies and curriculum models. Rather than academic or "skill/drill" oriented, the curriculum could best be described as traditional and eclectic. A balance of activities are offered which include free selection of indoor and outdoor materials for discovery learning and play; group discussions and learning activities to develop basic concepts and increase general knowledge; and opportunities for creative expression, music, movement, language and art.

While the program is similar to those offered at many other university preschools, there is one notable difference. All parents who have children enrolled in the BYU preschool are required to participate in a weekly parent education program sponsored by the early childhood education faculty. The content of this program could also be described as traditional and eclectic. It has been based on a parenting manual,

Parents and the Achieving Child (Cahoon, Price & Scoresby, 1979). Parents may choose from four different methods of participation in parent education: (a) attend classes, (b) listen to cassette tape recordings, (c) receive home visits by undergraduates majoring in early childhood education, or (d) read a parent education textbook. Content of the information was the same for all four participation options. Both fathers and mothers were expected to participate in the program as well as to be engaged in application activities with their preschool children for an hour or so each week.

Data Collection

From the preschool testing phase of the longitudinal project, four competency measures were used for the current study. These included: (a) the Test of Motor Ability for Young Children (TMAYC, Hirst, 1976) to assess physical skills involving agility, dynamic balance, static balance and strength; (b) the Slosson Intelligence Test (SIT, Slosson, 1981) which is a short and individually given IQ test modeled after the Stanford Binet; (c) the Early Childhood Self-Concept Index (ECSCI, Larsen & Leigh, 1977), a locally devised

measure of the child's positive self perception; and (d) the California Preschool Social Competency Scale (CPSCS, Levine, Elzy, & Lewis, 1969), an observational measure of the child's social skills.

All measures were individually given to the children over a two week period at the end of the preschool term. Assessments were administered by graduate and undergraduate testers who had completed the standard training regime recommended by the test publishers or developers. With the exception of the social competency scale which was completed during a 2 1/2 hour observation period, each measure took from 15 to 30 minutes to complete with each child.

Data from children attending the preschool were gathered as they were engaged in their normal activities. The data from children not enrolled in the preschool were gathered during a special two week preschool session on the BYU campus. Parents were invited to have their children attend this special preschool session to facilitate the research program. A program very similar to that given in the regular preschool was provided during the two weeks that they

were being tested.

In addition to the competency measures, family demographic data were gathered through a parent questionnaire. A summary of the demographic information is presented in Table 1. These variables which also included preschool attendance were considered to be predictor variables, while scores on the ECSCI, SIT CPSCS and four subscores on the TMAYC were specified as competency measures. The means and standard deviations for these measures are presented in Table 2.

Insert Tables 1 and 2 about here

A two step process was used in analyzing the data. First, the Pearson Product-moment coefficients were computed between the family demographics, including preschool attendance (exogenous variables), and the four competency measures (endogenous variables). Second, all of the exogenous variables that were significantly ($p < 0.05$) related to each of the endogenous variables were entered into a series of stepwise multiple regression analyses. The intercorrelations between the

exogenous and endogenous variables which met the significance level required for entry into the regression analyses are presented in Table 3.

Insert Table 3 about here

The SPSS stepwise regression technique, developed by SPSS Inc. (1983), was the method selected for the regression analysis. This technique allows for the specification of multivariate models yielding the predictive equation for each endogenous variable with the highest R^2 using the fewest number of variables. For the purpose of selecting the best regression equations the following basic criteria were used as limiting factors: (1) The final model had to have an F ratio significant at the 0.05 level or lower; (2) no new equation would be considered unless it demonstrated an increase of at least 0.01 in the coefficient of determination (R^2) over the previous equation; and (3) any variable added to the model must be significant at the 0.10 level or lower. Any equation established under the SPSS stepwise technique that failed to meet any of these

basic criteria was not considered for the final model.

Separate regression models were constructed for three variables. These included IQ as measured by the SIT and two components of physical ability - motor skill vis-a-vis static balance and physical strength vis-a-vis long jump as indicated by respective subscores on the TMAYC. As shown in Table 3, six exogenous variables significantly related to IQ scores. Three predictor variables included in the final regression model for IQ were father's occupation, preschool attendance and living in a two parent family. The variables in each of the regression models are presented in Table 4. The raw B values from the SPSS (1983) program have been converted into standardized beta weights so that the relative impact of each variable might be compared.

Insert Table 4 about here

Four influence variables different from those associated with IQ were shown to be significantly related to the static balance component on the test of

motor abilities. Three of these were included in the final regression model-time mother spends with child, preschool non-attendance and number of older siblings. While two influence variables were shown to be significantly related to physical strength, only the child's sex appeared in the regression model. Boys demonstrated greater strength as indicated by long jump subscores on the TMAYC.

No other regression analyses were conducted since only one influence variable significantly correlated with other outcome measures. As presented in Table 3, a positive correlation of family income with social competency scores existed, while the sex of the child was shown to be associated with scores on the measure of self-concept (girls scored higher). Finally, there was a significant negative correlation of maternal employment with the child's dynamic balance as measured by hopping on the motor abilities test.

DISCUSSION

Since socioeconomic factors such as parental occupation and education as well as family income have been found to be positively related to intellectual

development (see Golden & Birns, 1976), it was not surprising to have these variables surface, along with preschool attendance, as influences of IQ in the present study. It would seem that father's occupation, which emerged as the strongest predictor of intellectual competency, may be indicative of not only family income, but also, father's education and perhaps even the time father spends with the child. This variable, along with the positive impact of living in a two parent family, is an indication of the strength of socioeconomic influences upon intellectual development in low-risk children.

The influence of preschool attendance on intellectual competency in this educationally-advantaged sample was anticipated since short-term increase in IQ scores had been found in the three previous study waves of the larger research project. However, with the active parental participation in the parent education component of the preschool program, it may be speculated that the preschool effect observed in the BYU longitudinal study waves is confounded with family influence variables. Bronfenbrenner (1979), suggested that a sustained family contribution was the key to realizing positive cumula-

tive effects from preschool for disadvantaged children. The same may be true for non-disadvantaged, particularly in a situation where parent education and involvement is an established component of the preschool program. Further exploration of a possible confounding of the preschool effect and parent influences should be made.

The exogenous variables associated with children's static balance skill all seem to have an implied, if not actual, element of time for social interaction with family members, especially mother (time with mother was shown to be the strongest predictor variable). For example the negative relationships of both preschool attendance and maternal employment with this component of motor ability could be interpreted to mean when the child is attending preschool and/or mother is away at work, they have less time together which has a negative effect on the development of motor skill (as shown in Table 2, balance scores for preschool non-attenders are substantially higher than for preschool attenders). Thus, when the child does not attend preschool and the mother does not work, the increased interaction time seems to enhance motor skill. This logic could be

applied also to the positive relationship with number of older siblings, more opportunity for social interaction.

It may be further speculated that if the increased interaction time with mother and siblings also means more support is given to the child, then the influence of these variables on motor skill development is very consistent with research showing supportive interaction with parents and/or significant adults to be associated with the development of overt behaviors (i.e. physical abilities) in children (Larsen, 1975; Thomas, Gecas, Weigert, & Rooney, 1974). In addition, these same studies concerning the differential effects of supportive behavior on children's functioning found supportive interaction time to be less predictive of cognitive capacities. Again, the predictors variables for IQ identified in the present study correspond with the findings regarding cognitive functioning in the Larsen (1975) and Thomas et. al.(1974) studies.

The sex of the child as a strong predictor of physical strength as well as a significant influence associated with scores on the self-concept measure, may be indicative of social stereotyping in the young

children of this study sample. Generally speaking boys are expected to be physically stronger than girls while it is expected more for girls to feel good about themselves and get along with others. This seems to hold true in the present study. In addition, the positive influence of family income on social competence in this middle and upper-middle SES population is very understandable since affluence can have an effect upon opportunities for social development.

The relationships presented in this report cannot be considered definitive. However, the identification of family variables associated with preschooler's competencies in the present study is a beginning step towards better understanding the influences on development in low/risk children. Further research is needed in order to determine the lasting effects of these relationships as well as obtaining more data concerning the similarities and differences of family influences on competencies in low-risk and high-risk children at various age levels.

References

- Berrueta-Clement, J. R., Schweinhart, L. J., Barnett, W. S., Epstein, A. S., Weikart, D. P., (1984).
Changed lives; The effects of the Perry Preschool program on youth through age 19. Monograph of the High/scope Educational Research Foundation Number 8, Ypsilanti, Michigan.
- Bronfenbrenner, U. (1979). The ecology of human development: experiments by nature and design. Cambridge, MA: Harvard University Press.
- Cahoon, O. W., Price, A. H. & Scoresby, A. L. (1979).
Parents and the Achieving Child. Provo, Utah: Brigham Young University Press.
- Dewey, T., & McKinney, D. (1976). Independence training as an index of achievement motivation: A study of LDS families. Unpublished paper, Harvard University.
- Elardo, R., & Bradley, R. H. (1981). The HOME Observation for measurement of the environment (HOME) Scale: A review of research. Developmental Review, 1, 113-145.
- Golden, M., & Birns, B. (1976). Social class and infant

intelligence. In M. Lewis (Ed)., Origins of intelligence. New York: Plenum.

Gottfried, A. W. & A. E. (1984). Home environment and cognitive development in young children of middle-socioeconomic-status families, In A. W. Gottfried (Ed.), Home environment and early cognitive development: Longitudinal reserach, (pp. 57-115). Fullerton, California: Academic Press, Inc.

Green, K. D., Forehand, R., Beck S. J., & Vosk, (1980). An assessment of the relationship among measures of children's social competence and children's academic achievement. Child Development, 51, 1149-1156.

Hirst, C. (1976) Summary report of validity and reliability of the motor ability for young children. Unpublished manuscript, Department of Physical Education-Sports, Brigham Young University.

Hunt, J. M. (1961). Intelligence and experience. New York: Ronald.

Kennedy, J. H., & Bakeman, R. (1984). The early mother-infant relationship and social competence

with peers and adults at three years. Journal of Psychology, 116, 23-24.

Larsen, J. M. (1975). Effects of increased teacher support on young children's learning. Child Development. 46, 631-637.

Larsen, J. M., Draper, T. W., & Hite, S. J. (1984). Preschool does make a difference for educationally-advantaged children: Longitudinal study update. Paper presented at the National Association for the Education of Young Children, Annual Conference, Los Angeles, California.

Larsen, J. M., Hite, S. J., & Hart, C. H. (1983). The effects of preschool on educationally-advantaged children: First phases of a longitudinal study. Intelligence, 7 (4), 345-352.

Larsen, J. M., & Leigh, G. (1977). Early childhood self-concept index technical report. Provo, Utah: Department of Family Sciences (ECE), Brigham Young University.

Lazar, I., Darlington, R., Murray, H., Royce, J. & Snipper, A. (1982). Lasting effects of early education: A report from the consortium for

longitudinal studies. Monograph of the Society for Research in Child Development, 47, (2-3, Serial No. 195).

Levine, S., Elzey, F., Lewis, M. (1969). California preschool social competency scale. Palo Alto: Consulting Psychologists Press, Inc.

Miller, L. B., & Dyer, J. L. (1975). Four preschool programs: Their dimension and effects. Monograph of the Society for Research in Child Development, 40 (5-6, Serial No. 162).

Pollitt, E., & Mueller, W. (1982). The relation of growth to cognition in a well-nourished preschool population. Child Development, 53, 1157-1163.

Ramey C. T., and Smith, B. (1977). Assessing the intellectual consequences of early intervention with high-risk infants. American Journal of Mental Deficiency, 81, 318-324.

Ramey C. T., & Haskins, R. (1981). The modification of intelligence through early experience. Intelligence. 5, 5-19.

Schweinhart, L., & Weikart, D. (1980). Young children grow up: the effects of the Perry Preschool

- program on youths through age 15. Monograph of the High/Scope Educational Research Foundation, 7.
- Slosson, R. (1981). Slosson intelligence test for children and adults (2nd ed.). New York: Slosson Educational Publications.
- SPSS, Inc. (1983). SPSS, users guide: A complete guide to SPSS language and operations. Chicago, IL.
- Thomas, D. L., Gecas, V. Weigert, A. J., & Rooney, E. A. (1974). Family socialization and the adolescent. Lexington, Mass. Lexington.
- United States Department of Commerce, Bureau of the Census. (1983). 1980 census of population, general social and economic characteristics, Utah. PC80-1-C-46. Washington, D.C.: U.S. Government Printing Office.
- Wachs, T. D. (1978). The relationship of infants' physical environment to their Binet performance at 2 1/2 years. International Journal of Behavioral Development, 1, 51-65.
- Walberg, H. J., & Marjoribanks, K. (1976). Family environment and cognitive development: Twelve analytic models. Review of Education Research, 46, 527-551.

- Zigler, E. & Seitz, V. (1980). Early childhood intervention programs: A re-analysis. School Psychology Review, 9, 354-368.
- Zigler, E. & Trickett, P. K. (1978). I.Q., social competence, and evaluation of early childhood intervention programs. American Psychologist, 33, 789-798.

Table 1

Family demographic characteristics of low-risk preschool children
(N=73)

	Percent
Preschool	
Attended	47.9
Did not attend	52.1
Sex	
Male	50.7
Female	49.3
Household Type	
One-parent	5.5
Two-parent	94.5
Number of Older Siblings	
0	19.4
1	25.0
2	11.1
3	20.8
4	8.3
4+	15.4
Number of Younger Siblings	
0	40.3
1	34.7
2	20.8
3	4.2
Father's Occupation Level	
Low	4.2
High	95.8
Mother's Employment	
Full	5.6
Part	19.4
No Employment	75.0

(Table 1 Continues)

Family Influences

30

Father's Highest Education Level

High school graduate	2.8
Some college	20.8
College graduate	26.4
Some graduate school	8.3
Masters degree awarded	6.9
Working on doctorate	2.8
Doctoral degree awarded	31.9

Mother's Highest Education Level

High school graduate	8.2
Some college	30.1
College graduate	35.6
Some graduate school	16.4
Masters degree awarded	5.5
Working on doctorate	1.4
Doctoral degree awarded	2.7

Family Income

Less than \$15,000	2.8
\$15,000-30,000	51.4
\$30,000-45,000	30.6
\$45,000+	15.3

Time Father Spends with Child Per Weekday

Less than 15 minutes	28.9
15 to 30 minutes	29.0
31 to 45 minutes	6.8
46 to 60 minutes	21.9
More than 60 minutes	11.1

Time Mother Spends with Child Per Weekday

Less than 15 minutes	5.7
15 to 30 minutes	10.0
31 to 45 minutes	5.7
46 to 60 minutes	22.9
More than 60 minutes	33.8

Table 2

Comparison of Means: ECSCI, SIT, CPSCS and TMAYC by Group and Sex
(N=73)

Group Sex	Preschool Attenders			Preschool Non-attenders		
	Total	Males	Females	Total	Males	Females
Number	35	18	17	38	19	19
ECSCI						
Mean	63.2	60.2	66.5	63.7	57.0	70.1
SD	21.1	23.1	18.8	20.6	22.1	17.3
SIT						
Mean	129.4	131.9	126.6	122.8	122.8	122.8
SD	14.4	12.3	16.5	13.1	12.3	14.2
CPSCS						
Mean	93.4	93.4	93.4	88.7	90.4	87.1
SD	11.8	12.3	11.6	11.9	11.7	12.1
TMAYC						
Agility						
Mean	6.1	6.2	6.1	6.1	6.0	6.1
SD	0.9	1.0	0.9	0.8	0.8	0.8
Hop						
Mean	26.2	22.6	30.1	28.2	26.0	30.3
SD	20.2	17.2	22.8	22.3	24.6	20.1
Balance						
Mean	16.9	15.9	18.0	25.0	29.3	20.6
SD	11.1	10.9	11.6	17.6	19.7	14.3
Long Jump						
Mean	31.2	33.0	29.2	30.5	32.3	28.8
Sd	5.8	5.0	6.1	5.5	6.0	4.4

Table 3

Significant correlations between family demographic variables and competency measures displayed in tables one and two (N=73)

	ECSCI	SIT	CPSCS	TMAYC			
				Agil	Hop	Bal	Lg Jp
Preschool Attendance		.23				-.27*	
Sex Male	-.24						.32**
Two Parent Household		.26*					
# of Older Siblings						.23	
Father's Occupation		.29*					
Mother's Employment					-.24	-.29*	
Father's Education							.21
Mother Education		.25					
Family Income		.31**	.40**				
Father Time w/child		.22					
Mother Time w/child						.50**	

*p<.01

**p<.005

Table 4

Influences of family demographics on competency measures of low-risk preschool children

IQ (SIT)

	beta
Father's occupation	.38
Preschool (attendance)	.28
Two parent household	.25
Mult R = 0.47, R^2 = 0.22	

Motor Skill (TMAYC - Balance)

	beta
Mother Time w/child	.46
Preschool (attendance)	-.26
# of older siblings	.20
Mult R = 0.60, R^2 = 0.36	

Motor strength (TMAYC - Long Jump)

	beta
Sex (male)	.31
Mult R = 0.31, R^2 = 0.09	